

## Amendments To Claims

1. (Previously Presented) A differential amplifier, comprising:
  - a pair of transistors;
  - a pair of mutually coupled inductors that are arranged to bias the transistors.
2. (Previously Presented) The differential amplifier of claim 1, wherein the mutually coupled inductors comprise a transformer.
3. (Original) The differential amplifier of claim 1, wherein the mutually coupled inductors are arranged to provide output impedance matching for the differential amplifier.
4. (Original) The differential amplifier of claim 1, wherein the mutually coupled inductors are arranged to provide input impedance matching for the differential amplifier.
5. (Original) The differential amplifier of claim 1, wherein the mutually coupled inductors are arranged to provide noise control for the differential amplifier.
6. (Original) The differential amplifier of claim 1, wherein the mutually coupled inductors are arranged to increase common mode rejection in the differential amplifier.
7. (Currently Amended) The differential amplifier of claim 1, wherein the ~~the~~ pair of mutually coupled

inductors are coupled in series with a source of each transistor.

8. (Currently Amended) The differential amplifier of claim 1, wherein the ~~the~~ mutually coupled inductors are coupled in series with a first terminal of each transistor.

9. (Previously Presented) The differential amplifier of claim 8, further comprising a second pair of mutually coupled inductors that are coupled in series with a second terminal of each transistor.

10. (Previously Presented) The differential amplifier of claim 9, wherein the mutually coupled inductors are arranged to bias the transistors and to provide output impedance matching and wherein the second pair of mutually coupled inductors are arranged to bias the transistors and to provide input impedance matching and noise control.

11. (Previously Presented) A method for providing a differential amplifier, comprising coupling a pair of mutually coupled inductors to bias a pair of transistors of the differential amplifier.

12. (Previously Presented) The method of claim 11, wherein coupling a pair of mutually coupled inductors comprises coupling a transformer to the transistors.

13. (Previously Presented) The method of claim 11, wherein coupling a pair of mutually coupled inductors comprises arranging the mutually coupled inductors to

provide output impedance matching for the differential amplifier.

14. (Previously Presented) The method of claim 11, wherein coupling a pair of mutually coupled inductors comprises arranging the mutually coupled inductors to provide input impedance matching for the differential amplifier.

15. (Previously Presented) The method of claim 11, wherein coupling a pair of mutually coupled inductors comprises arranging the mutually coupled inductors to provide noise control for the differential amplifier.

16. (Previously Presented) The method of claim 11, wherein coupling a pair of mutually coupled inductors comprises arranging the mutually coupled inductors to increase common mode rejection in the differential amplifier.

17. (Currently Amended) The method of claim 11, wherein coupling a pair of mutually coupled inductors comprises coupling the pair of mutually coupled inductors in series with a source of each transistor.

18. (Previously Presented) The method of claim 11, wherein coupling a pair of mutually coupled inductors comprises coupling the mutually coupled inductors in series with a first terminal of each transistor.

19. (Previously Presented) The method of claim 18, further comprising coupling a second pair of mutually coupled inductors in series with a second terminal of each transistor.

20. (Previously Presented) The differential amplifier of claim 19, wherein the mutually coupled inductors are arranged to bias the transistors and to provide output impedance matching and wherein the second pair of mutually coupled inductors are arranged to bias the transistors and to provide input impedance matching and noise control.